

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1-26 (Cancelled)

27. (Currently Amended) A method for ~~the detection in vitro detection~~ of a given, predefined pathological condition associated with a deregulation ~~of in~~ a cell signaling pathway in a human subject, wherein said given, predefined pathological condition ~~is a pathological condition that causes disease in a tissue distinct from nucleated blood cells of said human subject, said method comprising:~~

- (i) providing a sample ~~of comprising nucleated blood cells from the subject being tested for the presence of said pathological condition, wherein said blood cells comprise lymphocytes, macrophages, monocytes or dendritic cells,~~
 - (ii) preparing nucleic acid molecules from the sample of step (i),
 - (iii) hybridizing all or part of the nucleic acid molecules from step (ii) to at least one nucleic acid library ~~capable of detecting the presence of said given, predefined pathological condition when contacted with a diverse population of nucleic acid molecules prepared from nucleated blood cells from a human subject having said given, predefined pathological condition under conditions allowing hybridization to occur, said library having an ordered arrangement on a support and comprising a plurality of nucleic acid molecules that specifically hybridize to differentially spliced ribonucleic acid molecules (RNAs) expressed in nucleated blood cells from human subjects known to have said given, predefined pathological condition, wherein said blood cells comprise lymphocytes, macrophages, monocytes, or dendritic cells and said differentially spliced RNAs are having an ordered arrangement on a support to obtain a first hybridization profile, wherein~~
- (a) ~~said plurality of nucleic acid molecules are specific for differentially spliced ribonucleic acid molecules (RNAs) expressed in blood cells from human subjects known to have the given, predefined pathological condition,~~

~~(b) the presence of said differentially spliced RNAs being characteristic of said given, predefined pathological condition that causes disease in a tissue distinct from nucleated blood cells, and~~

~~(c) said blood cells from human subjects known to have said given, predefined pathological condition comprising lymphocytes, macrophages, monocytes, or dendritic cells, and~~

~~(iv) detecting hybridization between a plurality of said nucleic acid molecules of said subject being tested and said nucleic acid molecules of said library, wherein said hybridization allows determination of correlating the first hybridization profile with a second hybridization profile obtained by hybridizing nucleic acid molecules from blood cells of a subject known to have said given, predefined pathological condition to said nucleic acid library, thereby indicating the presence or absence of said given, predefined pathological condition in said subject being tested.~~

28-29 (Cancelled)

30. (Previously Presented) The method of claim 27, wherein the nucleic acid molecules prepared from the sample are total or messenger RNA or complementary deoxyribonucleic acid (cDNA) derived therefrom.

31. (Previously Presented) The method of claim 30, wherein the nucleic acid molecules prepared from the sample are amplified.

32. (Currently Amended) The method of claim 27, wherein the nucleic acid molecules prepared from the sample are labeled.

33. (Previously Presented) The method of claim 27, for the detection *in vitro* of the stage of progression of said given, predefined pathological condition in said subject.

34-43 (Cancelled)

44. (Previously Presented) The method of claim 27, wherein said support is a membrane, a glass plate, or a biochip.

45-46 (Cancelled)

47. (Currently Amended) The method of claim 27, wherein said pathological condition is characterized by ~~an~~ excessive cell proliferation.

48. (Currently Amended) A method for ~~the detection~~ *in vitro* detection of a given, predefined pathological condition characterized by ~~an~~ excessive cell proliferation in a human subject, wherein said given, predefined pathological condition ~~is a pathological condition that causes disease in a tissue distinct from nucleated blood cells of said human subject, said method comprising:~~

(i) providing a sample ~~of comprising nucleated~~ blood cells from the subject ~~being tested for the presence of said pathological condition, wherein said blood cells comprise lymphocytes, macrophages, monocytes or dendritic cells,~~

(ii) preparing nucleic acid molecules from the sample of step (i),

(iii) hybridizing all or part of the nucleic acid molecules from step (ii) to at least one nucleic acid library ~~capable of detecting the presence of said given, predefined pathological condition when contacted with a diverse population of nucleic acid molecules prepared from nucleated blood cells from a human subject having said given, predefined pathological condition under conditions allowing hybridization to occur, said library having an ordered arrangement on a support and comprising a plurality of nucleic acid molecules that specifically hybridize to differentially spliced ribonucleic acid molecules (RNAs) expressed in nucleated blood cells from human subjects known to have said given, predefined pathological condition, wherein said blood cells comprise lymphocytes, macrophages, monocytes, or dendritic cells and said differentially spliced RNAs are having an ordered arrangement on a support to obtain a first hybridization profile, wherein~~

(a) ~~said plurality of nucleic acid molecules are specific for differentially spliced~~

~~ribonucleic acid molecules (RNAs) expressed in blood cells from human subjects known to have said given, predefined pathological condition,~~

~~(b) the presence of said differentially spliced RNAs being characteristic of said given, predefined pathological condition that causes disease in a tissue distinct from nucleated blood cells, and~~

~~(c) said blood cells from human subjects known to have said given, predefined pathological condition comprising lymphocytes, macrophages, monocytes or dendritic cells, and~~

~~(iv) detecting hybridization between a plurality of said nucleic acid molecules of said subject being tested and said nucleic acid molecules of said nucleic acid library, wherein said hybridization allows determination of correlating the first hybridization profile with a second hybridization profile obtained by hybridizing nucleic acid molecules from blood cells of a subject known to have said given, predefined pathological condition to said nucleic acid library, thereby indicating the presence or absence of said given, predefined pathological condition in said subject being tested.~~

49. (Currently Amended) The method of claim 48, wherein said given, predefined pathological condition characterized by an excessive cell proliferation is stenosis.

50. (New) The method of claim 48, wherein said nucleated blood cells comprise lymphocytes, macrophages, monocytes or dendritic cells.

51. (New) The method of claim 48, wherein said nucleic acid library further comprises a control nucleic acid molecule.

52. (New) The method of claim 27, wherein said nucleated blood cells comprise lymphocytes, macrophages, monocytes or dendritic cells.

53. (New) The method of claim 27, wherein said nucleic acid library further comprises a control nucleic acid molecule.